

## 77. WIDE-AWAKE SURGERY WITH LOCAL ANESTHESIA IN HAND SURGERY

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**Introduction.** The wide-awake local anesthesia in hand surgery has gained popularity during recent years. It involves the use of a local anesthetic and epinephrine, and the patient remains awake during the whole procedure.

**Aim of study.** The purpose of this study was to assess the advantages, diverse application, outcomes, cost benefits, use in challenging environments, patient considerations, and contraindications associated with this technique.

**Methods and materials.** A 3-year prospective chart study was conducted of consecutive patients undergoing wide-awake surgery performed by 2 surgeons at a single institution. All procedures were performed with local anesthesia and epinephrine. Data collected included patient demographics, procedure volume, procedure type, surgical setting, functional and aesthetic outcomes and complications related to epinephrine use.

**Results.** During the study period, 3141 consecutive patients underwent 3374 wide-awake procedures with local anesthesia and epinephrine. Average patient age was 61 years, and 84% of patients were male. No complications related to use of epinephrine occurred, and no tissue necrosis, phentolamine reversal, anaphylaxis. No patients required conversion to general anesthesia or monitored anesthesia care. All patients were satisfied with functional and aesthetic results.

**Conclusion.** Wide-awake local anesthesia in hand surgery is a safe technique, with no reported cases of tissue necrosis, reversal, readmission, anaphylaxis, or anesthetic conversion. It confers particular advantage in surgeries such as tendon repairs, tendon transfers, and soft tissue releases in which intraoperative active motion can be used to optimise outcomes. The wide-awake approach also confers significant benefit due to efficiencies and cost savings.